

REVIEWS OF BOOKS.

THE INTERNATIONAL TEXT-BOOK OF SURGERY by American and English Authors. Edited by J. COLLINS WARREN, M.D., LL.D., and A. PEARCE GOULD, M.S., F.R.C.S. Volume I. General and Operative Surgery. Philadelphia: W. B. Saunders, 1899.

This work affords excellent illustration of the changes wrought in instruction by the discoveries of laboratory workers during the past twenty-five years. In the early seventies the suspicion began to grow that dust had something to do with disease, particularly suppurative conditions in wounds. It took, however, all the years of that decade to hunt down the causes of wound infection, and to prove beyond a doubt its bacterial source. In all the works on surgery published during these years of research, but little stress is therefore laid upon what may be termed the natural history of infections. Some authors refer in a timid way to the possibility of germ life bearing a causal relation to these surgical diseases. Others omit all mention of the subject. Not one bases the treatment on the cause. So as we turn the pages of these ancient works, for it is not so much lapse of time as lapse of events which make a book ancient to-day, we find in the chapters on diseases of bones and joints such expressions as *scrofula*, the *strumous diathesis*, white swellings. In the chapters on inflammation, we are entertained with discussions of the origin of pus. Erichsen in 1872 says, "Commonly, mechanical injuries are those that occasion surgical inflammation." He fails to mention the part that micro-organisms play in the resulting infection. The chapters on *scrofula* and *tubercle* abound in the description of the microscopic appearances of the parts, and frequent mention is made of the giant cell. In fact, what we now recognize as the barrier which nature attempts to throw around the invading bacteria (*Metsch-*

nikoff) was then described as an essential element of the disease. So to-day pathologists talk in a learned way which leads not whither, of the epithelial cell and the connective tissue cell, and cellular rests and fetal survivals. Some day a second Koch will arise and show us that these are the results of irritation and not the cause. Let no one, however, gird at the pathologist, for to his labors are we indebted for all that is progressive and hopeful in medicine and surgery.

The work before us commences with a brief but excellent treatise on bacteriology. Thus the student of to-day starts at the point where his fathers in the profession finished. He sees clearly where his predecessors saw not at all or through a glass darkly. He knows that pus is never laudable, that scrofula means tuberculosis; and suppuration, infection. The first lesson that he must be taught, therefore, is one which will make him familiar with the various agents of infection. Dr. Ernst has succeeded in compressing this knowledge in a few pages, from which a surgeon of older date, to whom laboratory instruction is denied, may get a sufficient and fair working knowledge of the subject. The very excellent plates which illustrate the microscopic appearance of the stained organisms give a faithful representation of what is actually seen in the field of the microscope. There is little to criticise in this article. Under the head of tetanus is a suggestion which may explain those cases of tetanus which develop in wounds that are apparently open. These wounds are in the experience of the reviewer always the seat of a mixed infection, and the explanation given that the oxygen is entirely consumed by the aerobic bacteria would account for the development of the anaërobic organism in conditions which would otherwise preclude its growth. The writer's remarks on the bacillus pyocyaneus are hardly in accord with recent literature respecting the pathogenic properties of this organism. Most writers on bacteriology, when treating of this bacillus, have perhaps followed Schimmelbusch, who in an article published in 1893 denied its pathogenicity. Since then so many instances have been published in which it was the undoubted agent of infection, that it seems hardly fair to dismiss it as non-pathogenic. For those who care to look the matter up, Lartigau's article on the subject is com-

mended, published in *The Journal of Experimental Medicine*, Vol. iii, 1898, p. 595. The reviewer in 1898 isolated the organism in pure culture in two cases of rapidly spreading gangrene, one case being the result of an infection of the middle finger by the spine of a fish; the other occurring in a laparotomy wound. It is undoubtedly true that such cases are uncommon, nevertheless they have accumulated in numbers sufficient to justify us in speaking of this organism as not infrequently pathogenic.

The chapters on inflammation, infection, and suppuration are admirable expositions. The different topics are treated in a manner to be expected of the scholarly editor. We are a little surprised, however, at the frequency with which the reader is advised to use "antiseptic poultices" in suppurative conditions. We cannot imagine what antiseptic can be added to any form of poultice that can redeem it from its pristine nastiness. It has been shown again and again that antiseptics which are capable of destroying pathogenic organisms also occasion cellular death and merely increase the general destruction. To join an antiseptic and a poultice is to violate the Rabbinical precept, "Though shalt not plough with an ox and an ass together." The statement that fistulæ-in-ano are usually tubercular is equivalent to saying that ischio-rectal abscesses are usually tubercular, a proposition which is scarcely tenable.

The chapter on the surgical pathology of the blood is another of those signs of the times of which this volume is full. The surgeon who puts its precepts into practice, will have fewer errors both of omission and commission of which to repent. If the general practitioner will also follow its teachings, we shall have fewer cases of suppuration treated as intermittent fever or rheumatism. A systematic blood analysis before operation would result in averting many a surgical defeat, for it is also true in surgery that he who fights and runs away may live to fight another day, likewise his patient. The chapter on wounds is a thorough and scholarly treatise on the subject, and for a volume on general surgery is exhaustive. It shows an extensive acquaintance with the literature and the facts both of pathology and treatment are marshalled in a logical sequence which

adds emphasis to the teaching. The space allotted to this review does not admit of more than a cursory mention of this and other excellent chapters, and it is with regret that the reviewer is compelled to omit mention, particularly where mention must mean praise. The chapter on the technique of aseptic surgery is important, and comprises within its pages an account of all the resources which science calls to our aid to-day in the production of an aseptic wound. The recommendation that the surgeon use sea sponges, comes from one who has much confidence in the ability of his nurses to render aseptic an animal substance by complicated processes and an equal confidence in the exchequer of the hospital. The use of gauze for sponges does not require so elaborate a cleansing process, and will certainly endear the surgeon who uses it to the guardian of the funds. Absorbent cotton placed in the middle of the gauze sponge diminishes its absorbability and makes it clumsy. Under the head of sterilization of dressings fractional sterilization is recommended. As this method depends on the assumption that spores undestroyed at the previous sterilizations will develop into the more vulnerable form, one cannot see the value of the method when applied to dry dressing, for spores do not develop into the rod forms nor arthrospores into cocci except in the presence of a nutrient medium.

The chapter on fractures is the fullest that has appeared on this subject in a work of this size. The writer who has brought to the subject a long and ripe experience, has not disappointed those who remember his classical study of fractures of the lower extremity of the radius. Excellent use has been made of the discovery of Röntgen to illustrate the changes in structure and function which occur as a result of fracture. An excellent account of the ambulant method of treating fractures of the lower extremity closes the chapter. The author of the chapter on dislocations has not neglected to make use of the recent monograph of Allis, on the subject of dislocations of the hip, a monograph which is a credit to American surgery. The chapter on tumors is by Bland Sutton, whose work on this subject is familiar to all. It is with regret that the reviewer is compelled to lay aside this volume. It is the most valuable work on the subject that

has appeared in some years. The clinician and the pathologist have joined hands in its production, and the result must be a satisfaction to the editors as it is a gratification to the conscientious reader.

ALGERNON THOMAS BRISTOW.

A MANUAL OF SURGICAL TREATMENT. By W. WATSON CHEYNE, M.B., F.R.C.S., F.R.S., Professor of Surgery in King's College, London; Surgeon to King's College Hospital, etc.; and F. F. BURGHARD, M.D. and M.S. (Lond.), F.R.C.S., Teacher of Practical Surgery in King's College, London; Surgeon to King's College Hospital, etc. In six imperial octavo volumes, with illustrations. Vols. I and II. Philadelphia and New York: Lea Brothers & Co., 1899.

The author's purpose is expressed in the preface, as follows: "We have ourselves frequently experienced the want of detailed information, especially as regards the after-treatment of our cases, and have had to learn the best methods of procedure from experience. Nothing can of course replace experience, but it is often of the greatest advantage to have a detailed record of that of others upon which to base one's work. It is this want that the present work is intended to supply. We have tried to put ourselves in the place of those who have to treat a given case for the first time, and we have endeavored to supply them with details as to treatment from the commencement to the termination of the illness. We have assumed that the reader is familiar with the nature and diagnosis of the disease, and we only refer to the pathology and symptoms in so far as it is necessary to render intelligible the principles on which the treatment is based, and the various stages of the disease to which each particular method is applicable.

"We have purposely avoided attempting to give anything like a complete summary of the various methods of treatment that have from time to time been proposed; to do so would merely confuse the reader. Only those plans are described which our experience has led us to believe are the best, but with regard to these we have en-